

Focused Site Inspection Prioritization Report

for the

Catty H D Corporation

USEPA ID No. ILT 180 012 585

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Prepared for

U.S. Environmental Protection Agency

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Work Assignment 32-5JZZ

For U.S. Environmental Protection Agency, Region V

Approved by: Alan Altman

Date: 8-15-95

For Illinois Environmental Protection Agency

Approved by: _____

Date: _____

EPA Region 5 Records Ctr.



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1.0 Introduction

On December 13, 1994, Black & Veatch Waste Science, Inc., the Alternate Remedial Contracting Strategy (ARCS) V contractor, was authorized, by approval of the work plan amendment by the U.S. Environmental Protection Agency (USEPA) Region V, to conduct a focused site inspection prioritization (FSIP) of several sites in Illinois.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) established a federal program for responding to the risks posed by uncontrolled releases of hazardous substances. CERCLA required the federal government to establish criteria for setting priorities among releases or threatened releases and specified these criteria be used to establish the National Priorities List. The USEPA responded to these mandates by developing the Hazard Ranking System (HRS) to more accurately quantify the relative risk posed by hazardous waste substance releases. A revised HRS was published in December 1990.

The objective of the FSIP is to review the outstanding screening site inspections (SSIs) performed before the implementation of the revised HRS for which a final decision has not been made regarding further action. The FSIP will determine whether the existing SSI information meets a minimum standard to reflect the revised HRS, and, if not, collect additional information by file review, reconnaissance and sampling on an as-needed basis. The FSIP will evaluate the threats posed to human health and the environment and provide sufficient documentation for USEPA to decide the appropriate future course of action (no further remedial action planned [NFRAP], further evaluation, or preparation of an HRS package).

2.0 Site Background

2.1 Site History

The Catty H D Corporation (Catty) facility, located at 11117 South Church Street in Huntley, McHenry County, Illinois, prints flexible labels and packaging for various items and supplies foil wrappings to the food industry. Figure 1 is a site location map. Figure 2 is a site layout.

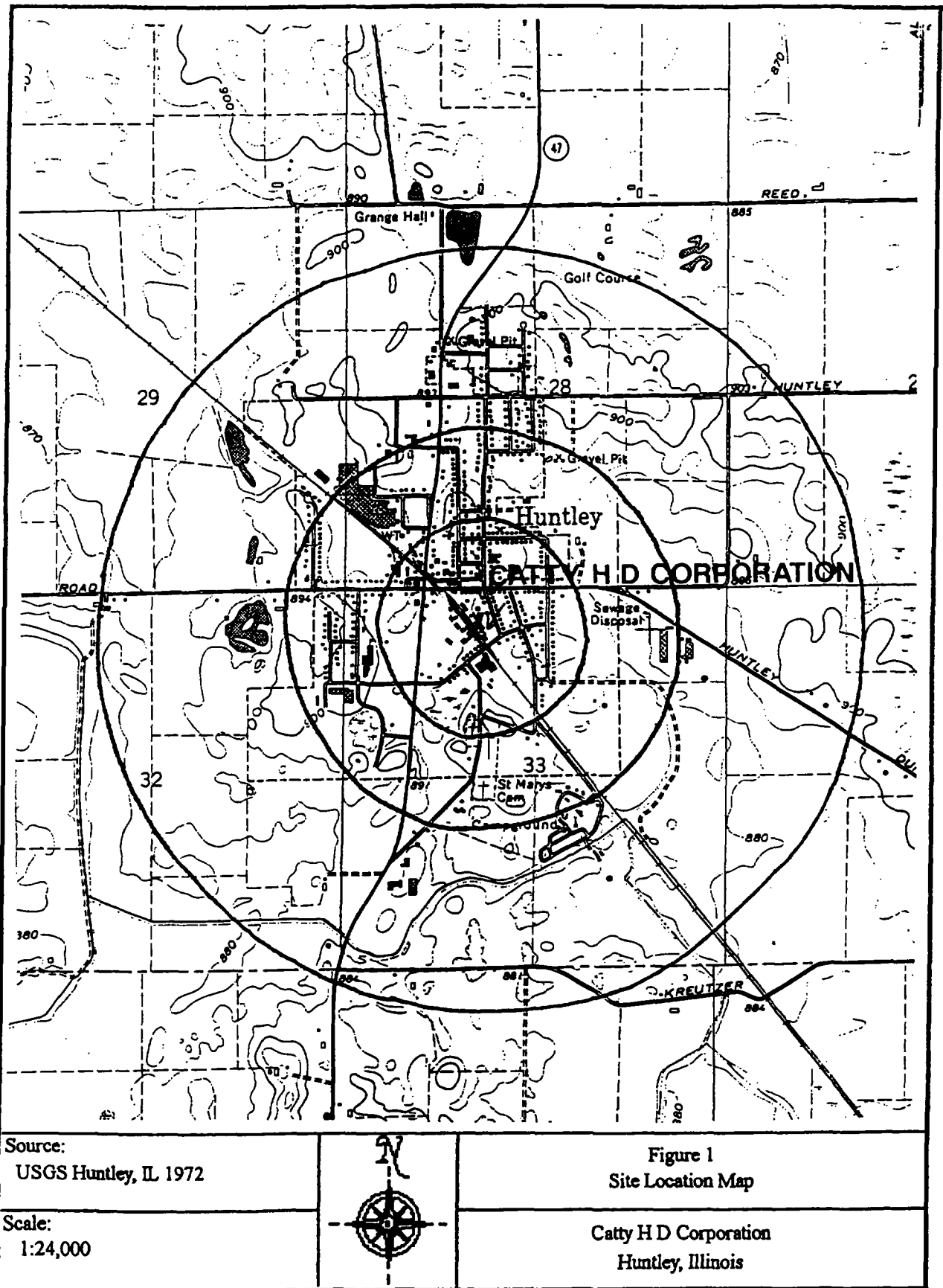
On October 8, 1987, Village of Huntley Public Works employees discovered impacted soils at the facility while excavating near Catty's drum storage area. Strong solvent odors and discolored soils were observed while digging a trench to repair a broken valve near the Huntley municipal well No. 4. The well is used as a standby well that is maintained for fire emergency purposes, and is located 15 feet away from the drum storage area. Village of Huntley workers also noticed spills and overturned drums on Catty's property. Analysis of a soil sample collected at a depth of 18 inches revealed the presence of 13 volatile organic compounds that ranged in concentration from 2.4 parts per million (ppm) to 13.2 ppm.

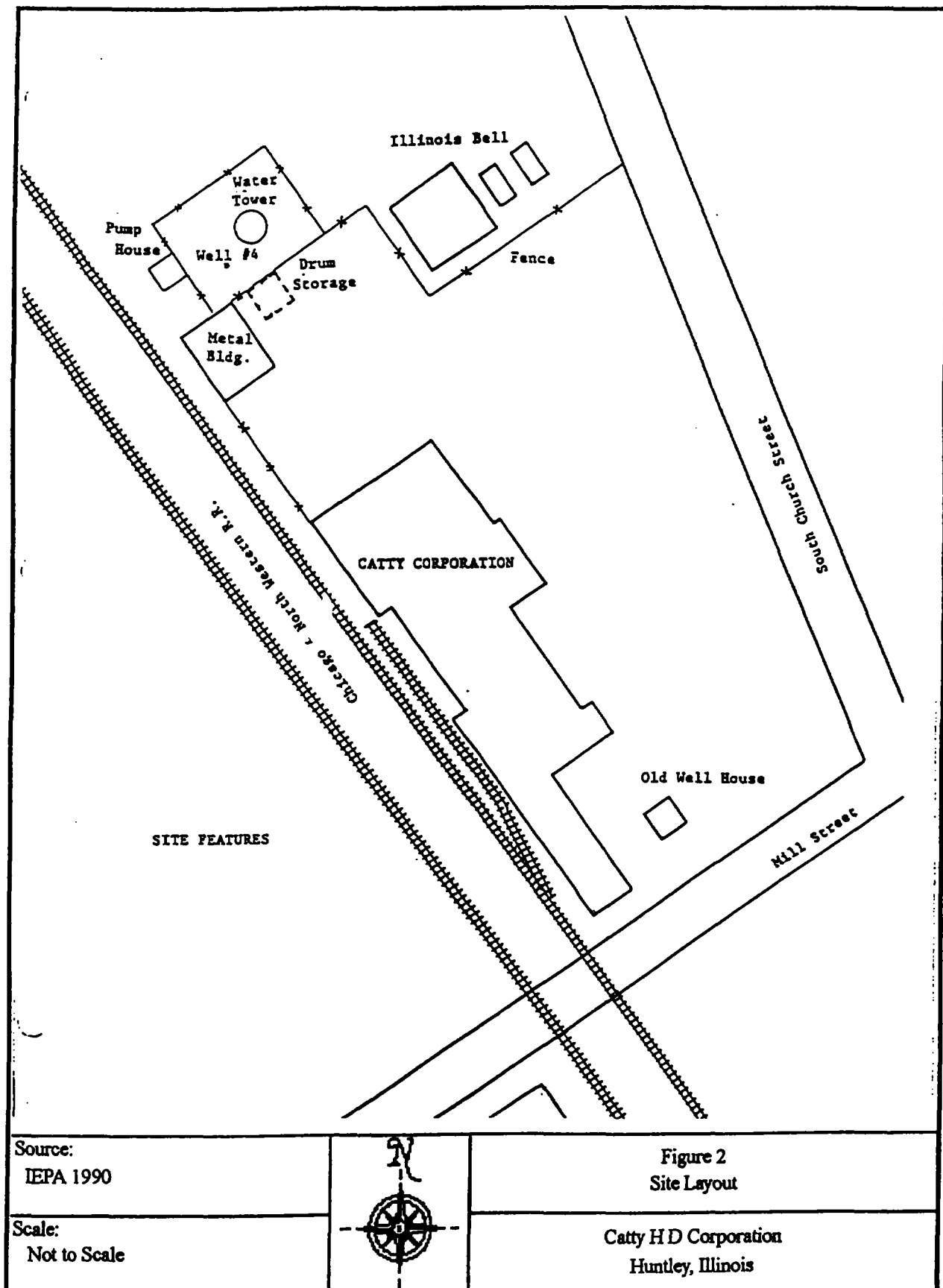
2.2 Past Site Characterization Studies

On November 20, 1987, IEPA conducted a site inspection. IEPA determined that the company was a generator subject to reduced requirements, and only minor Resource Conservation and Recovery Act violations were found. A concrete base had been built for the drum storage pad, and the pad was diked. In a follow-up inspection on February 4, 1988, IEPA noted that violations cited during the previous inspection were resolved.

On May 3, 1988, IEPA took soil gas readings and collected soil samples from test pits located on the village property adjacent to Catty's drum storage pad. Results of the soil gas survey indicated that subsurface contamination was greatest immediately adjacent to the Catty drum storage area and decreased further away from the pad.

On April 4, 1990, IEPA performed a site reconnaissance as part of a screening site inspection (SSI). No spills or stained soil were noticed. On April 25, 1990, IEPA collected two groundwater samples and seven subsurface soil samples. Groundwater samples were collected from municipal well No. 4, located 15 feet north of the site, and municipal well No. 6, which is 0.75 miles south of the site. Lead and manganese were found in municipal well No. 4 at levels that defined an observed release;





however, their concentrations were not above Safe Drinking Water Act maximum contaminant levels. Six subsurface soil samples were collected around the drum storage area; the background sample was collected offsite. Analytical results of subsurface soil samples, taken from around the drum storage area at depths of 3.5 feet to 6 feet, indicated an observed release of several contaminants, including acetone, toluene, ethylbenzene, xylenes, naphthalene, 2-methylnaphthalene, pentachlorophenol, bis(2-ethylhexyl)phthalate, arsenic, barium, copper, lead, mercury, and zinc.

According to the village of Huntley, contaminated soil around municipal well No. 4 on the village's property was excavated and removed around 1990. IEPA indicated the possibility that soil was contaminated by leaky plumbing and pump equipment for municipal well No. 4. The well has not been used for drinking water since about 1990, but the well is maintained annually by the village for fire emergency purposes (Appendix A). No samples have been collected from the well since 1989. Contaminated soil on the Catty property was not removed.

In January 1995, the ARCS V contractor began reviewing site information that indicated soil contamination and an observed release to the nearby offsite municipal well. Lead and manganese were found in the offsite municipal well, and lead was found at an elevated concentration in subsurface soils around the drum storage pad. Current site information was provided by Tim Murphy, IEPA, who indicated that no further site work was planned because the site is not a threat (Appendix A). Information gathered during this review was presented to the USEPA FSIP work assignment manager.

2.3 FSIP Site Reconnaissance/Sampling

No site reconnaissance visit or sampling was conducted during the FSIP.

3.0 Pathway Evaluation

A review of the records obtained by the ARCS V contractor indicates contaminated soil is a potential source at the Catty H D Corporation site. A contaminated soil source volume of 59 cubic yards was delineated from subsurface soil samples collected from around the drum storage area. The program evaluated four contaminant transport pathways: groundwater, surface water, soil exposure and air.

3.1 Groundwater Pathway

The general geology of the area consists of glacial drift with interbedded sands and gravel underlain by the Cambrian-Ordovician sandstones and dolomites. The sand and gravel aquifer, which is 200 feet thick, is the aquifer of concern. The Cambrian-Ordovician aquifer is separated from the sand and gravel aquifer by a shale confining layer.

Area residents receive their water from either private or municipal groundwater wells. A review of Illinois State Water Survey (ISWS) database information suggests that wells are finished in the sand and gravel aquifer or the Cambrian-Ordovician bedrock aquifer. The ISWS databases indicate most private wells and two Huntley municipal water wells are screened in the sand and gravel aquifer. One Huntley municipal water well is screened in the Cambrian-Ordovician bedrock. An estimated 3,386 people are served by wells within a 4-mile radius of the site.

The nearest drinking water well is Huntley's municipal well No. 4 and is 15 feet north of the site. The well is 63 feet deep and screened in the sand and gravel aquifer. The well has not been used in 5 years, but is maintained annually as a standby well for potential drinking water use and for fire emergency purposes. Approximately 818 people, which is approximately one-third of the population of the village, were assigned as drinking water targets associated with this well. Lead and manganese were found above background levels; however, the concentrations of the substances were not above Safe Drinking Water Act maximum contaminant levels.

3.2 Surface Water Pathway

Overland flow to a nearby surface water body does not exist because surface water runoff is intercepted by roads and collected by storm sewers.

3.3 Soil Exposure Pathway

Analysis of subsurface soil samples indicated the presence of volatile and semivolatile organic compounds and inorganic analytes; however, the samples were collected greater than 2 feet below ground surface. Therefore, the soil exposure pathway is not a concern.

The site is surrounded by a fence, and 25 employees work onsite. Approximately 2,574 people reside within 1 mile of the site.

3.4 Air Pathway

No air contamination has been documented or reported. No air samples have been collected at the site.

Approximately 3,311 people live within a 4-mile radius of the site. Sensitive environments within a 4-mile radius include 1,644 acres of wetlands, 4 nature preserves, 6 state endangered plants, 2 state threatened plants, 1 endangered bird, and 2 state threatened birds.

4.0 Summary

The ARCS V contractor conducted a thorough review of the available files associated with the Catty H D Corporation in Huntley, Illinois. No site reconnaissance visit was conducted and no samples were collected during the FSIP investigation. It was concluded that contaminated soil constitute a potential source of contamination.

A shallow Huntley municipal well is located 15 feet from the waste source; however, the well is a standby well maintained by Huntley for fire emergency purposes. Analysis of a groundwater sample collected during a 1990 SSI indicated the presence of lead and manganese in the municipal well; however, the concentration of the substances were not above Safe Drinking Water Act maximum contaminant levels. Overland flow from the site to a nearby surface water body does not exist; surface water runoff is intercepted by roads and collected by storm sewers. Constituents found in site soil samples collected during the 1990 SSI were greater than 2 feet below ground surface, and a diked concrete base was built for the drum storage pad. No air contamination has been documented or reported.

5.0 References

Illinois Environmental Protection Agency (IEPA), Screening Site Inspection Report for Catty H D Corporation. September 19, 1990.

IEPA, Division of Public Water Supplies, Raw Source Location Report, 1992.

Illinois Natural Heritage Database, Lists of Illinois Natural Areas Inventory, Nature Preserves and Endangered and Threatened Species Groups by County, October 1994.

Illinois State Water Survey, printouts of PICSS and Private Well databases, 1995.

Telephone memorandum of conversation between Village of Huntley employee and G. LaVerghetta, Black & Veatch Waste Science, Inc., regarding municipal well use. March 30, 1995.

Telephone memorandum of conversation between Tim Murphy, IEPA, and G. LaVerghetta, Black & Veatch Waste Science, Inc., regarding current IEPA status of site. February 3, 1995.

U.S. Department of Commerce, 1990 Census of Population and Housing, Illinois.

U.S. Department of the Interior, National Wetlands Inventory Maps, 7.5 Minute Quadrangles, Crystal Lake, IL (1980); Elgin, IL (1980); Huntley, IL (1980); Pingree Grove, IL (1980).

U.S. Geological Survey, 7.5 Minute Quadrangle Topographic Maps, Huntley, IL (1972); Crystal Lake, IL (1992); Elgin, IL (1992); Pingree Grove, IL (1992).

Appendix A
Telephone Memorandums

Black & Veatch

TELEPHONE MEMORANDUM

Client USEPA

B&V Project 71380.111

Project Catty H D Corporation

B&V File D.2

Subject Current IEPA status

Date 2/3/95

Time 900

① To/From: Tim Murphy

Company: IEPA

Phone No.: (217) 782-6760

Recorded by: Greg LaVerghetta

Tim told me that no further work is planned for Catty because there is not a major threat and they have much more contaminated sites. The site is not in pre-notice or voluntary cleanup.

The city of Huntley cleaned up the soil around their well and removed several truckloads of soil. He said the pump and motor for the water tower might have been partially responsible for the contamination but the city of Huntley wouldn't speculate. He verified that the well is still used and surface water runoff is unlikely to intersect the nearest stream.

He said the drum storage area was built before they returned for the inspection.

cc: file

TELEPHONE MEMORANDUM

Client USEPA
Project Catty Corporation
Subject Municipal well #4 water usage

B&V Project 71380.111
B&V File D.2
Date 3-30-95
Time 1520

① To/From: Village of Huntley
Company: " "
Phone No.: (708) 669-1171
Recorded by: Greg LaVerghetta

Well #4 is maintained for drinking water purposes, but it has not been used for over 5 years for dw. They maintain it for the fire dept. but the lines are still hooked into the distr. system. They have no intention of using it for dw again, but it is still functionally possible.

cc:

